



# Components

- Visitor Center / Interactive Science Center
- Research Experiences
- Teacher Professional Development & Preparation of Future Teachers
- Distance Education
- Lectures & Short-courses

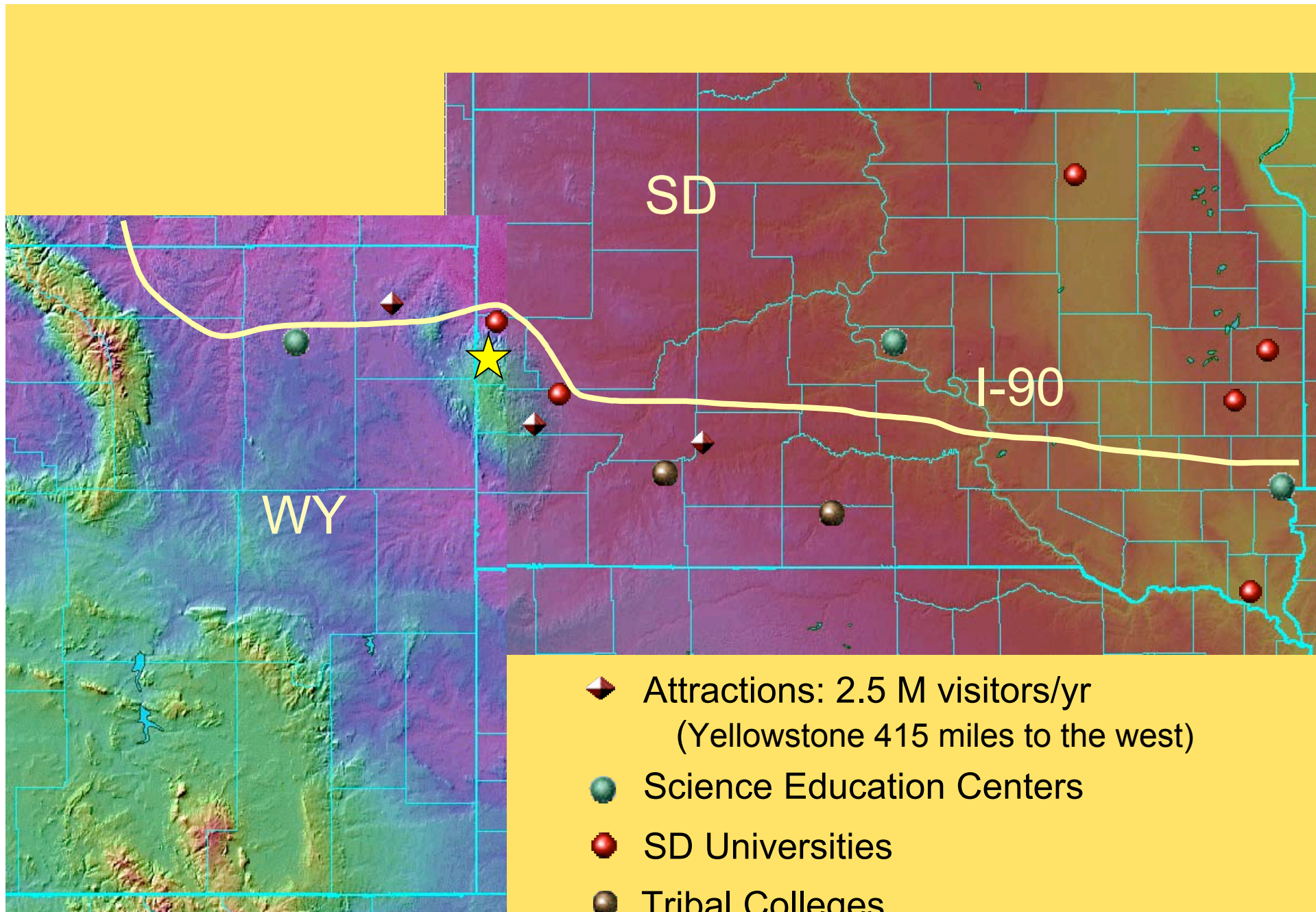
# Themes

- Sparking Public Interest and Increasing Public Understanding
- Serving Diverse Audiences
- Fostering an Intellectually Rich Environment
- Optimizing Scientist Involvement
- Approaching E&O as Scholarship

# Infusing & Supporting the Work

- Rigorous Research & Evaluation
- Supportive Climate & Infrastructure
- Partnerships
  - Scientists, science educators, & education researchers
  - National and regional universities, tribal colleges, K-12 school districts, government agencies, & Science Centers
- Technology

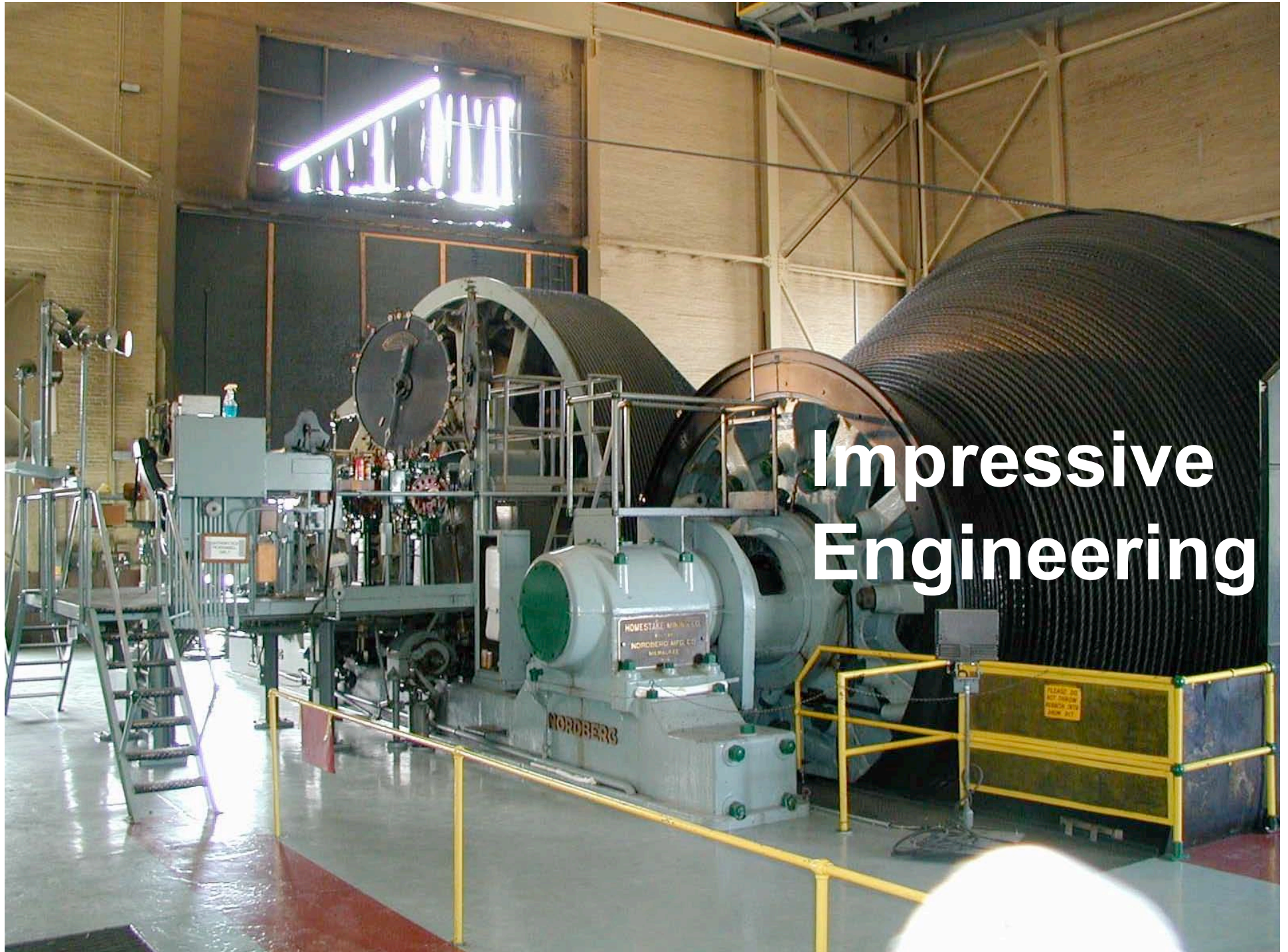




# Concept for Science Education Center







**Impressive  
Engineering**

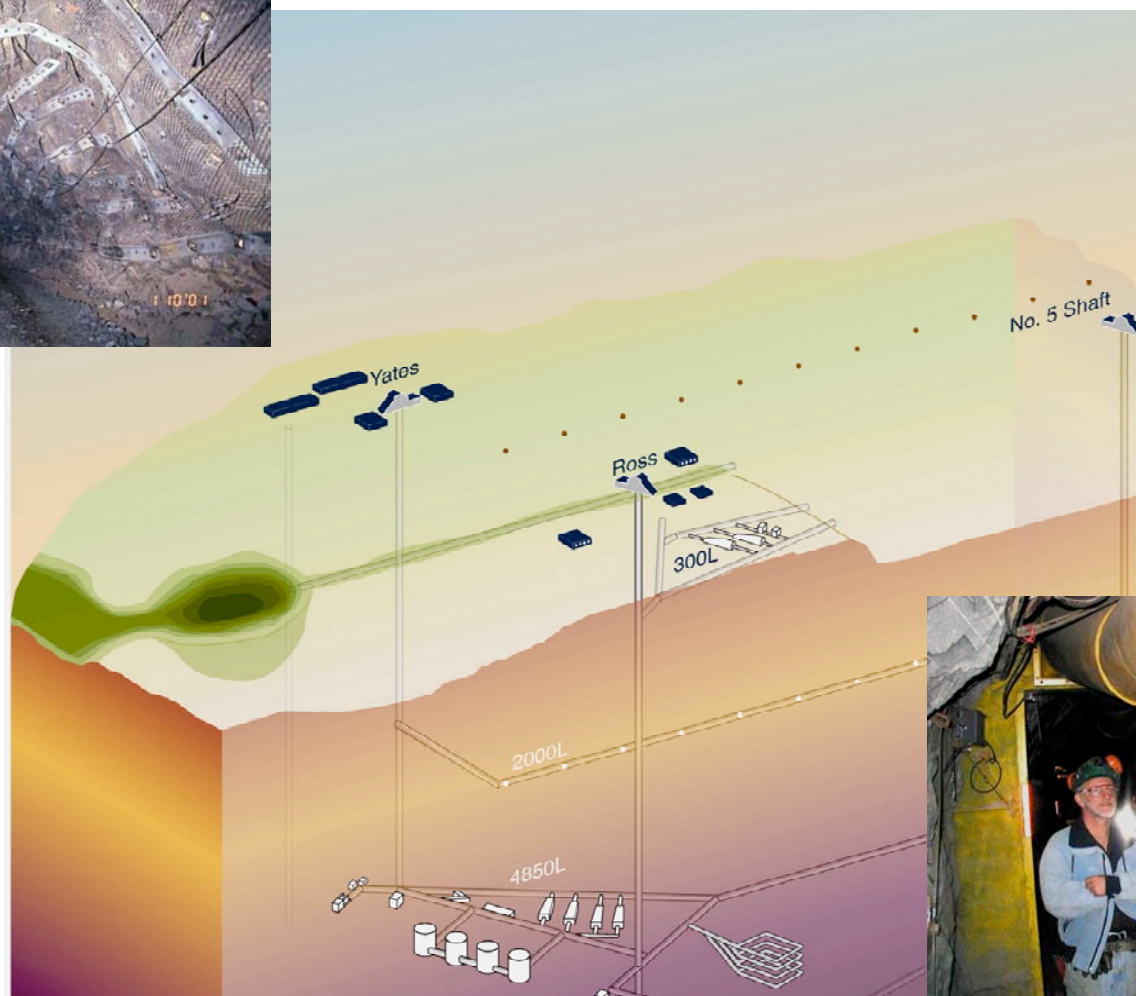




## Nature Trails

- To highlight geology & ecology
- To collect surface samples (microbes, water quality, geochemistry)





# Underground Science Experience at 300 ft

# Early Implementation

- Partnering with South Dakota's Center for the Advancement of Mathematics & Science Education (CAMSE)
  - CAMSE brings existing capacity and strong regional relationships
  - A division of CAMSE has been established at Homestake for rapid development of E&O
- Drawing on expertise from LIGO, Fermilab, Exploratorium, etc.



# Audiences & Impact

## Current:

- Teachers: 1,000/yr
- K-12 Students: 30,000/yr
- General Public: 50,000/yr



## Vision:

- Teachers: 2,000/yr
- K-12 Students: 60,000/yr
- General Public: 250,000/yr

# Homestake E&O Strengths

- λ Committed project leaders, state leaders, and area educators
- λ Building on existing experience & partnerships
- λ Plans in place for early implementation
- λ Fiscal resources (including Sanford gift)





## E&O Strengths (continued)

- λ Captivating science across disciplines
- λ Interesting history of science, science of mining, site history...
- λ Opportunities to collaborate with teaching colleges and tribal colleges
- λ Location: campus, access, & audiences

